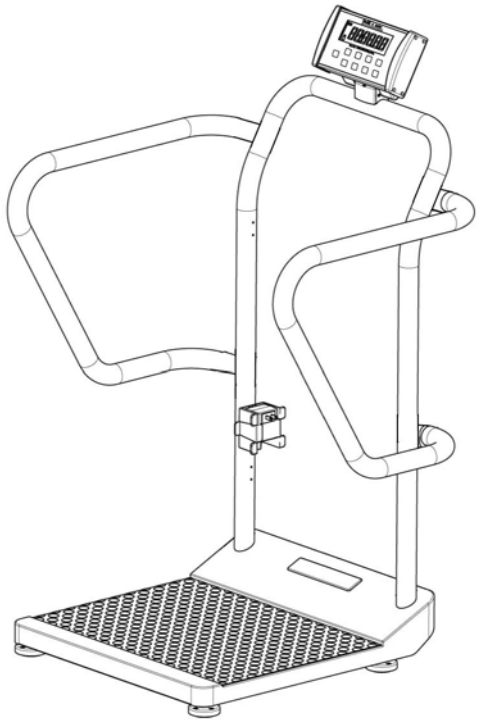
Health o meter®
Professional

Model 1100KL
Digital Handrail Scale



User Instructions

P/N UM1100KL Rev 3-080613

Health o meter®
Professional

Model 1100KL

Thank you for your purchase of this Health o meter® Professional product. Please read this manual carefully, and keep it for easy reference or training.

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Note: This scale has been factory calibrated, and does not require calibration prior to use.

Please register your scale for warranty coverage at:
http://www.homscales.com/customer/registration.aspx
For User Instructions updates and revisions, please go to:
http://www.homscales.com

CAUTION AND WARNING

- To prevent injury and damage to your scale, please follow these instructions very carefully.
- Assemble and operate the scale per the enclosed user instructions.
- Operate this scale exclusively with the AC adapter provided by Health o meter® Professional. Use of an unspecified adapter will void the warranty, and can pose a serious safety hazard.
- Prior to using this scale, inspect the AC adapter cord for cracking / fraying, or for broken / bent plug prongs.
- Prior to using this scale, ensure that the AC adapter is plugged into an outlet with the rated voltage appropriate for operation.
- Ensure that the AC adapter outlet is wired to a circuit breaker or other protected power source.
- Unplug the AC adapter, and carefully store both the adapter and adapter cord before moving the scale.
- Ensure that the AC adapter and scale do not come in contact with liquids, excessive temperature, or excessive humidity.
- Operating this scale at voltages and frequencies other than specified can damage the equipment and will void the warranty.
- Do not transport the scale with any weight on the platform.
- Do not exceed recommended weight limit of 1000 lb / 454 kg for this scale.
- For accurate weighing, this scale must be placed on a flat, stable surface.
- For accurate weighing, verify before each use the proper operation according to the procedure described in this manual.
- Do not use in the presence of flammable or explosive materials.
- For accurate weighing, if the “Lo bAtt” indicator activates, replace the batteries or switch to the AC adapter as soon as possible.
- When replacing / inserting batteries, be sure to use all new batteries.
- To prevent patient injury, the patient must be attended throughout the entire weighing event.
- If the scale is being connected to another medical device, the power adapter must not be used. Disconnect the power adapter from the scale and use only the battery power.

SPECIFICATIONS FOR THIS SCALE

General

The Model 1100KL digital handrail scale uses highly sophisticated microprocessor technology. Each precision scale is designed to provide accurate, reliable and repeatable weight measurements. In addition, each scale is designed to provide the user with features that make the weighing process simple, fast, and convenient.

This scale is set up to use motion-sensing weighing technology in order to determine the actual weight of a moving patient.

Weight can be displayed in pounds or in kilograms. The scale features built-in handrails for patient comfort and safety. It also has a 180° swivel display head for privacy and easy operator reading from either side of the scale. This scale has 2 wheels built-in for easy mobility. **This scale can be powered using an AC adapter (included), or by 6-AA batteries (not included).**

1100KL Scale Specifications

Capacity and Resolution	1000 lb x 0.2 lb (454 kg x 0.1 kg)	
Power Requirements	110 - 240VAC, 50-60Hz - 9V DC adapter or 6 - AA batteries	
Environmental	Operating temperatures: 50°F to 95°F (10°C to 35°C) Storage temperatures: 30°F to 125°F (0°C to 50°C) Maximum Humidity: 85% RH	
Physical Dimensions	**Platform** Length: 18” (46 cm) Width: 22” (56 cm) Height: 2-1/2” (6 cm)	**Assembled Size and Weight** Length: 29-1/4” (74 cm) Width: 31” (78.7 cm) Height: 49-1/2” (126 cm) Weight: 53 lb (24 kg)

CERTIFICATIONS / CONNECTIVITY / DISPOSAL

Certification Descriptions

ISO13485:2003 CERTIFIED	Pelstar, LLC has been officially certified as the manufacturer of Health o meter® Professional medical devices. The Pelstar, LLC quality assurance system covers the development, production, sales and service of medical scales and measuring systems.
MET c US	This product is tested to and meets the requirements of: 1. UL60601-1 First Edition: Safety for Medical Electrical Equipment 2. CSA C22.2 No. 601-1 M90: Medical Electrical Equipment

1100KL Scale Connectivity Information

To enable reliable transmission of weight, height, and Body Mass Index (BMI) data, this scale is designed to connect to a computer, monitor, or other electronic device via a built-in USB port. This connectivity helps minimize a source of potential medical errors caused by incorrectly copying and then recording patient data.

This scale is EMR-EHR compatible. For more information regarding how to connect this scale to other electronic devices, please contact Health o meter® Professional Scales Technical Support, available during normal business hours at 1-800-638-3722.

1100KL Scale Disposal

This Health o meter® Professional scale must be disposed of properly as electronic waste. Follow the national, regional or local regulations which apply to you for disposal of electronic waste or batteries. Do not dispose of this device in the domestic waste stream.

1100KL ASSEMBLY INSTRUCTIONS

Before Assembly

Each 1100KL digital handrail scale is shipped disassembled in a single carton. Carefully inspect the carton for shipping damage before unpacking. If damage is found, contact your shipper or a Health o meter® Professional representative immediately at 1-800-815-6615. Claims must be filed with the shipper as soon as possible after receipt of the package. The following information details what you will find inside the main carton as you unpack the parts for assembly.

To prevent scratching any components, carefully remove each assembly from the carton and unwrap the packing materials. Set the carton aside for storage. To avoid damaging the scale parts when unpacking, do not use a box cutter, knife, scissors, or any sharp object to open the protective inner packaging.

Parts List

(1) Scale platform
(1) Center handrail
(2) Side handrails
(1) Small brown carton
The small brown box contains:

- (1) Box containing the AC adapter
- (1) Long white box
- (1) User Information
- (1) Display assembly

The long white box contains:

- (4) Feet
- (1) 10mm Allen wrench
- (1) 5mm Allen wrench
- (1) AC adapter holder
- (2) Pivot bracket screw covers
- (2) Plastic bag containing:
- (2) Covers for Display Support (Front & Back)
    - o Hardware for assembly (see Figure 1)

Tools Required

Phillips head screwdriver (not included), Allen wrenches (included).

Assembling the 1100KL Scale (Refer to Figures 1-7)

Caution: It is recommended that the assembly be performed by two persons.

1. Remove the scale platform from the carton and place scale platform on a flat, level, and dry surface.
2. Locate and pick up the center handrail. Find the load cell cable connector, located at the bottom of the center handrail. Untie it and pull it out the bottom (see Figures 2 & 3).
3. Position the center handrail over the handrail supports on the platform and feed the cable through the handrail support hole located on the right handrail support in the platform. Be sure not to pinch the cable (see Figures 2, 3, & 7).
4. Position the center handrail over the left and right handrail supports on the platform. Fasten the handrail to the platform using (4) M8 1.25 x 3/8 screws (B) and (4) M8 washers (E). Use the 5mm Allen wrench to tighten the screws. Do not over tighten (see Figures 1, 2 & 4).
5. Loosely attach the left and right side handrails to the center handrail, using (4) M10 1.5 x 1 ½ screws (A). Use the 8mm Allen wrench to fasten the screws (see Figures 1 & 2).
6. Pull forward on the side handrails to tip the scale and gently place it face down on the floor.
7. Grasp the load cell cable protruding from the bottom of the base of the scale and feed it through the protective metal shield above the wheel. Plug the connector into the load cell port located on the side of the platform (see Figure 7).
8. Pull the excess cable through the top of the center handrail (see Figure 2).
9. Thread the (4) feet into the underside of the platform. Each foot should be completely hand tightened. Once tighten, back feet out 1-½ full turns. This allows for proper load cell operation for accuracy of the scale (see Figures 2 & 7).
10. Carefully tilt the scale back to an upright position on the floor.

Warning: Do not drop scale, as this can permanently damage the load cells.

11. Adjust the feet to level the scale. Be certain that the feet are not completely tightened into the platform (refer to the scale platform - feet assembly instruction above).
12. Position the display assembly close to the display support. Plug the load cell cable connector into the load cell port on the rear of the display assembly (see Figures 2 & 6).

Note: Do not attach the power cord at this point.

13. Align the four mounting holes on the back of the display assembly with the four mounting holes in the display support. Fasten the display assembly onto the metal display support by using (4) Phillips pan head M4 screws (D). Use Phillips head screwdriver to tighten the screws (see Figures 1 & 5).

1100KL ASSEMBLY INSTRUCTIONS (CONTINUED)

14. Place the pivot bracket screw covers over the pivot screws. Fasten the covers to the back of the display using (4) Phillips pan head M4 screws (D). Use Phillips head screwdriver to tighten the screws (see Figures 1 & 5).
15. Attach the adapter holder to the center rail using (2) #8 x ½ sheet metal screws (C). Use Phillips head screwdriver to tighten the screws (see Figures 1 & 2).
16. Connect the AC adapter to the power port in the display. Do not plug the scale into a power source until the scale is fully assembled (see Figure 6).
17. Attach the front and rear display support covers, applying light pressure to snap these covers into place (see Figure 2).
18. The scale is now assembled. Plug the AC adapter into a power source and / or insert batteries.

1100KL ASSEMBLY INSTRUCTIONS (CONTINUED)

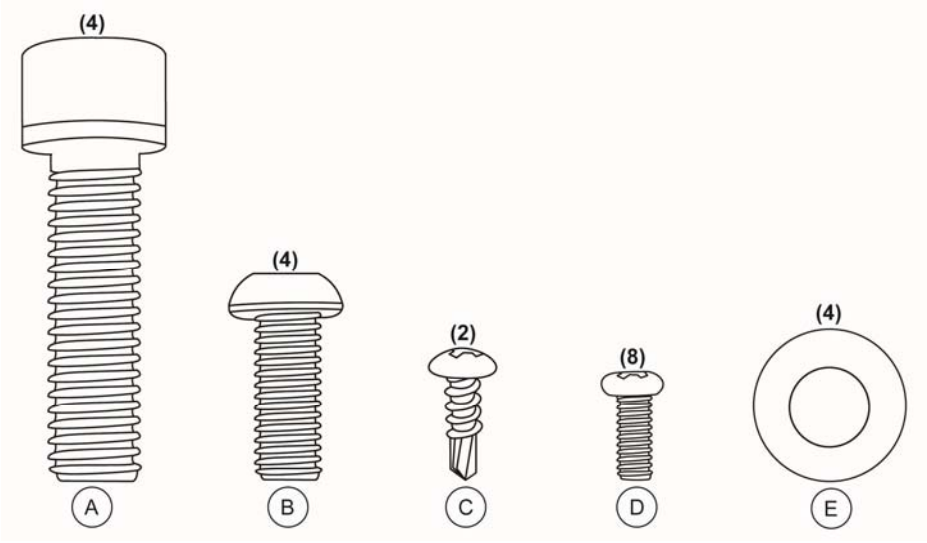

Figure 1

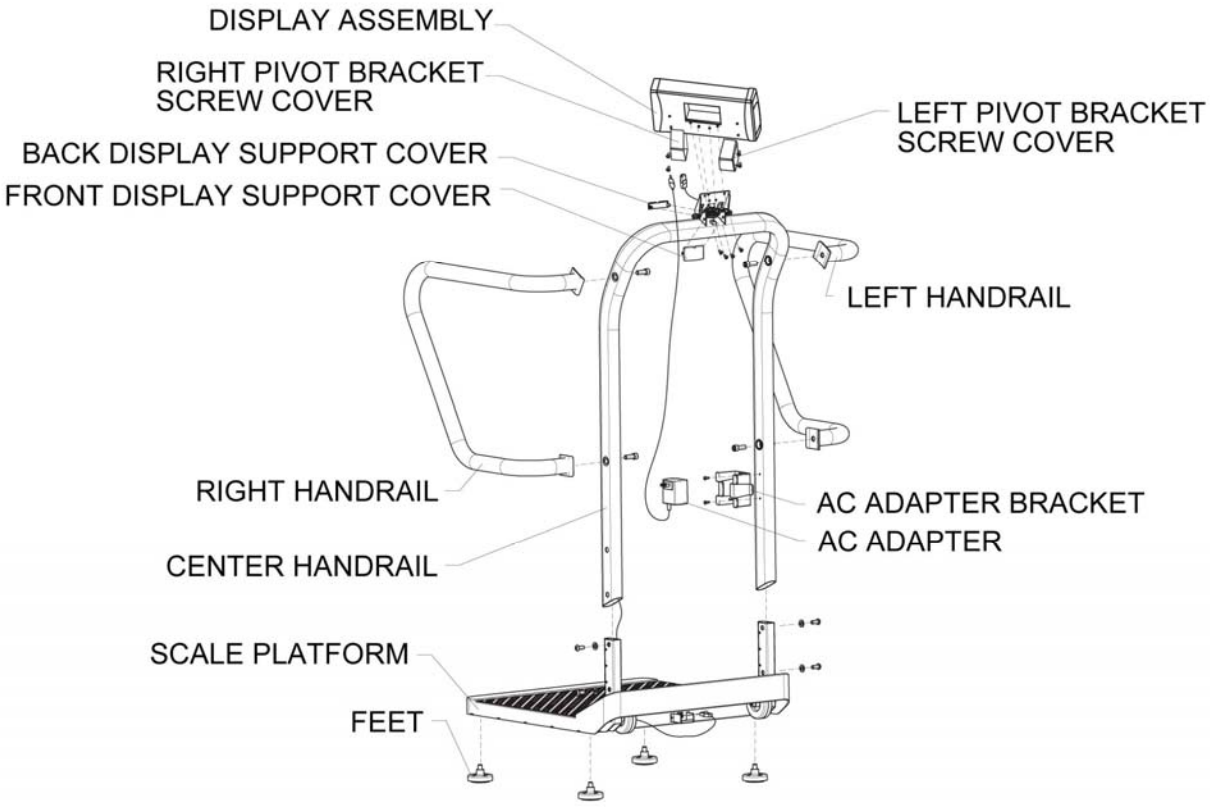

Figure 2

1100KL ASSEMBLY INSTRUCTIONS (CONTINUED)

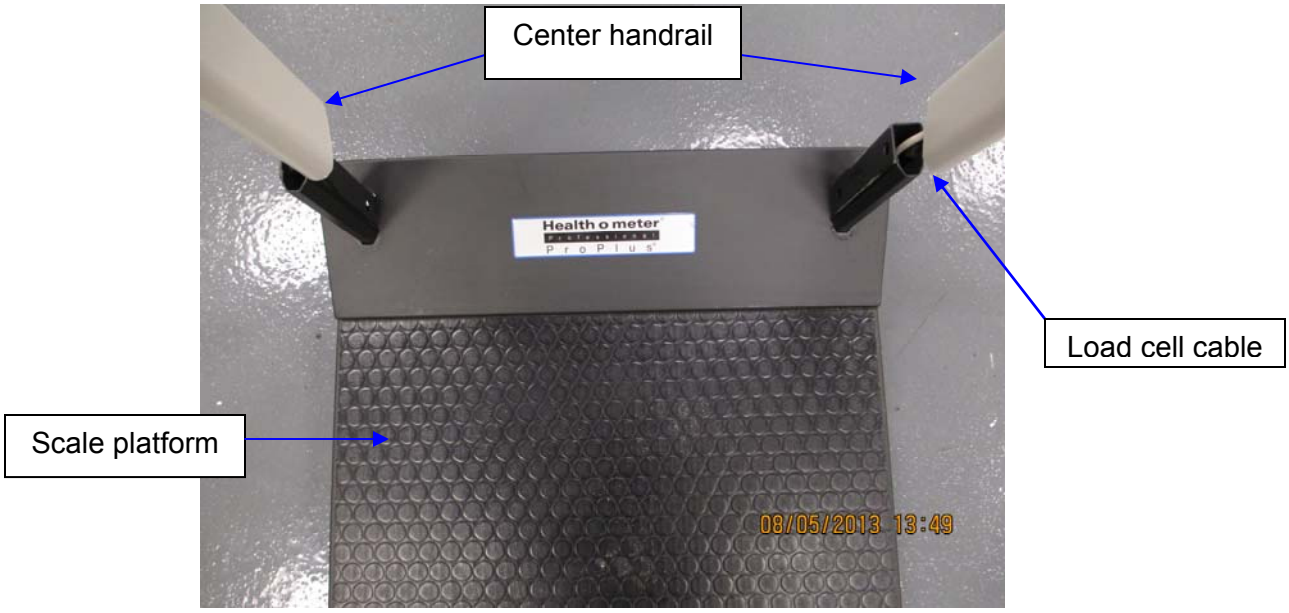

Figure 3

Figure 4

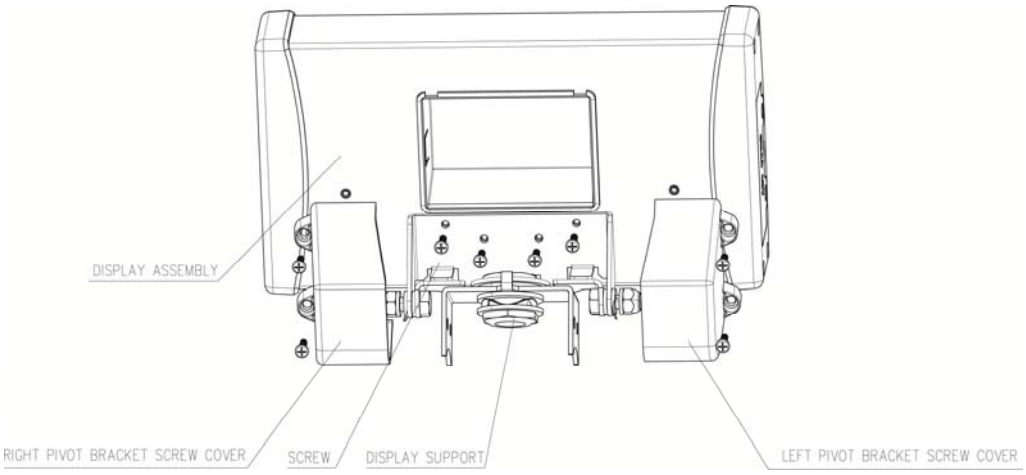

Figure 5

Figure 6

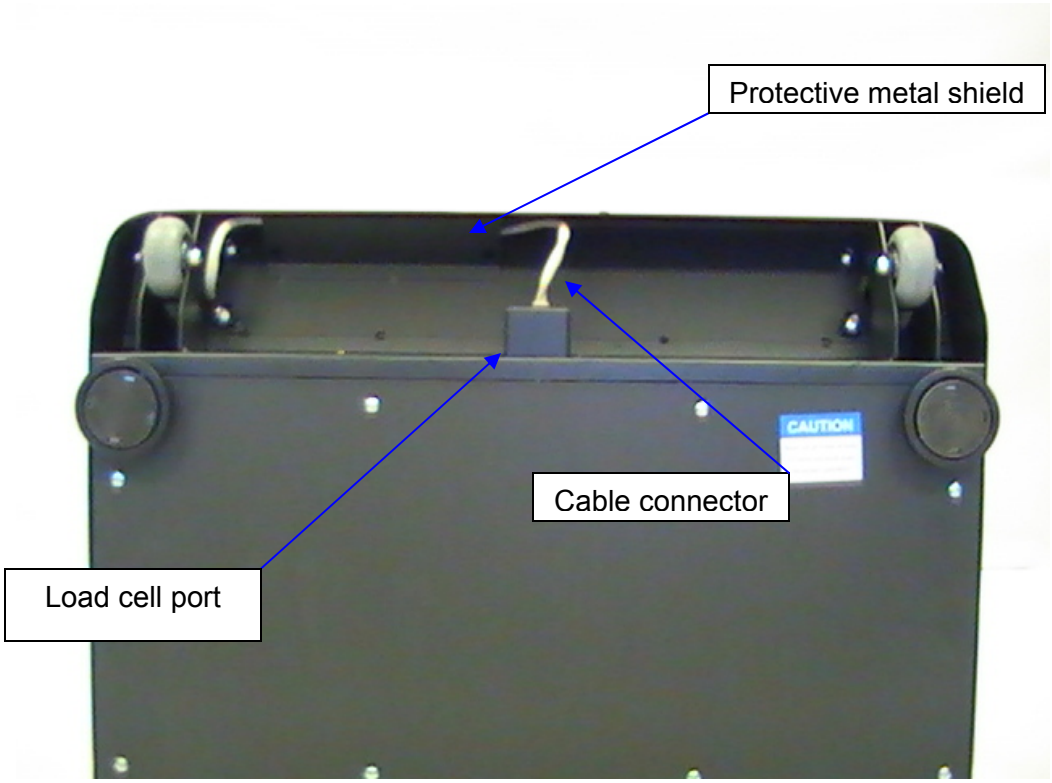

Figure 7

SETUP / BATTERIES

Preparing the 1100KL Scale for Use

1. Remove the protective plastic film covering the display (the film says “FACTORY CALIBRATED”).

2. Place batteries into the battery holder (see “Replacing / Inserting Batteries” information below).

3. Connect the AC adapter into the adapter jack on the display assembly.

Warning: To avoid a safety hazard, use AC adapter model ADPT30.

4. Plug the scale’s AC adapter into the power source.

5. Ensure all objects are removed from the scale’s platform, and then press the **ON/OFF** button to power the scale on. The display will show “Start”, then “0.0” LB or “0.0” KG. Press the **UNIT** button to select the weight mode (LB or KG).

Note: This scale will always default to the settings and units last used (LB or KG).

6. When the AC adapter is disconnected from the scale, the scale will switch to battery power if batteries are installed.

Note: If the set up procedure failed, refer to the troubleshooting instructions. If the problem is not corrected, refer to qualified service personnel.

Replacing / Inserting Batteries

1. Unplug the AC adapter from the power source.

2. Remove the battery cover on the side of the display assembly by unscrewing the (2) battery cover screws (see Figure 7).

3. Replace or install the batteries with new units. Health o meter recommends using an alkaline or lithium battery, rated for 130°F (54°C) operation. Do not use Zinc-Carbon batteries.

4. Re-attach the battery cover to the display assembly.

Warning: If the scale will not be used for some time, remove the batteries to avoid a safety hazard. Disposal of batteries must be performed in accordance with the prevailing national, regional or local regulations which apply to you.

SETUP / BATTERIES (CONTINUED)

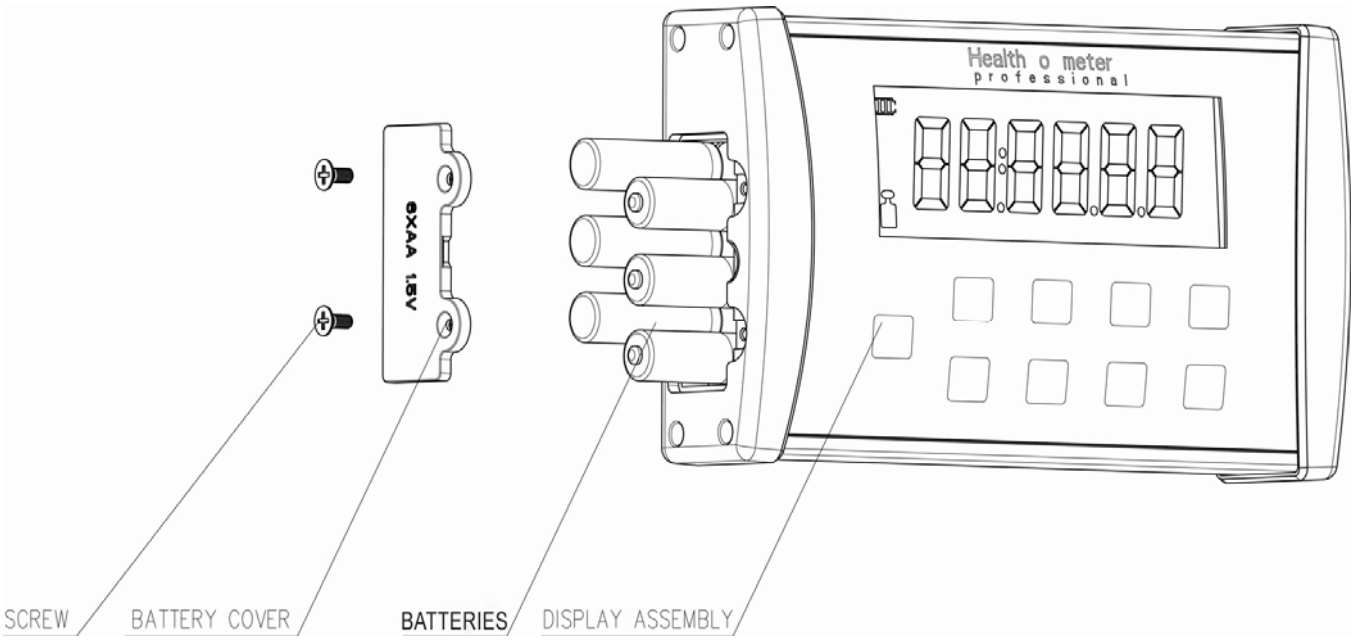

Figure 8

Keypad

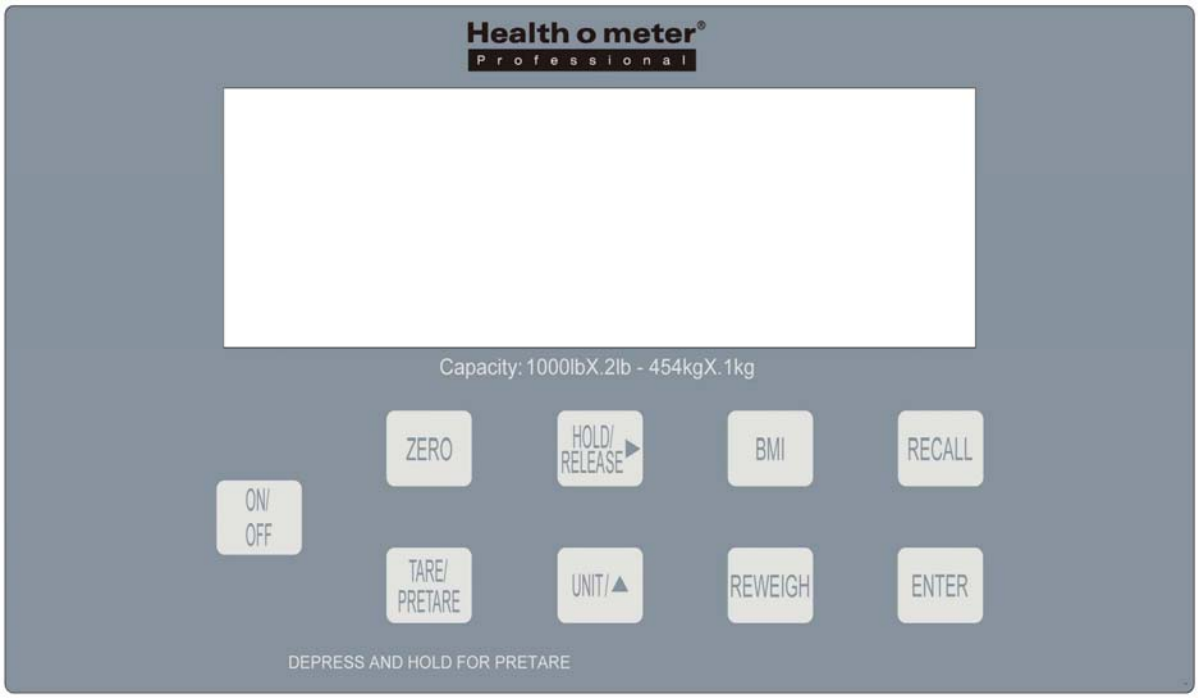

Figure 9

Function	Description
ON/OFF	Power scale on and off.
ZERO	Zeros the scale prior to a weighing.
HOLD/RELEASE ►	Holds the weight value of the patient on the display until the button is pressed again to clear the value. Also moves the cursor from left to right on the display for entering height and pretare value.
BMI	Prompts entry of height data to calculate patient's Body Mass Index (BMI).
RECALL	Recalls the previous weight.
TARE/PRETARE	TARE-Tares out weight of an object on the platform. PRETARE-Prompts entry of a tare value that will be deducted from the weight on the platform. Also releases tare weight (returns display to zero).
UNIT/▲	Toggles between pounds and kilograms. Also used to increment height value and pretare value.
REWEIGH	Allows repeated weighing of the patient without stepping off the scale.
ENTER	Used to accept height value in BMI mode, and tare value in PRETARE mode. Also releases the recall value and BMI value.

Tare Function

When using this scale, the weight of an object, such as a chair, can be subtracted from the total weight in order to determine the weight of the patient alone. The Tare Function automatically performs this subtraction. The 1100KL scales allow tare weight to be entered manually by using the keypad, or automatically, as outlined in this section.

Tare

1. With all weight off the scale, press the **ON/OFF** button to power on the scale.
2. Wait until the "0.0" LB or "0.0" KG appears on the display.
3. Place the object to be tarred on the scale. The display will show a value for the object's weight.
4. Press the **TARE** button. The scale will zero out, and the word "TARE" will appear at the bottom center of the display, indicating that there is a tare value for the object.
5. Remove the object from the scale. Once the object is removed from the scale, the display will show a negative weight, equal to the weight of the object.
6. Place the patient and the object back on the scale. The scale will automatically deduct the tare weight of the object from the gross weight of the patient and object together.
7. The weight of the patient will appear on the scale.
8. With no weight on the scale, the tare value will remain on the display until changed, cleared, or until the scale is powered off.
9. To remove the Tare, press the **TARE** button. The word "TARE" will disappear from the bottom of the display, and the tare value will be cleared from the display. The scale will resume normal operation.

Pre-Tare (Limit 200 lb)

1. Make sure that there is no object on the scale.
2. Press the **ON/OFF** button to power on the scale.
3. Wait until the "0.0" LB or "0.0" KG and "ZERO" appear on the display.
4. Hold down the **TARE** button for 3 to 5 seconds. The word "TARE" will appear at the bottom center of the display, and the user will be prompted to enter the tare value.
5. Use the keypad ► and ▲ buttons to enter the weight of the object. Press the **ENTER** button.
6. The value entered will show as a negative value on the display.
7. Place the patient and the object onto the scale. The scale will automatically deduct the tare weight as entered, from the gross weight of the patient and the object.
8. The weight of the patient will appear on the scale.

9. With no weight on the scale, the tare value will remain on the display until changed, cleared, or until the scale is powered off.

10. To remove the Tare, press the **TARE** button again. The word “TARE” will disappear from the display and the tare value will be cleared from the display. The scale will resume normal operation.

Weighing a Patient

Note: When this scale is powered on, it will always default to the settings and units last used (LB or KG).

1. Make sure there is no object on the weighing platform.

2. Press the **ON/OFF** button to power the scale on.

3. Wait until the “0.0” LB or “0.0” KG appears on the display.

4. Ask the patient to step on the scale. The scale will begin to display weight information and will lock on the patient’s weight when the stable weight of the patient is determined. Depending on the movement of the patient on the scale, it may take several seconds for the scale to lock onto the weight.

5. Once a weight has been displayed, while the patient is still on the scale, Health o meter recommends performing a second weighing by pressing the **REWEIGH** button.

6. The weight may be held on the display by pressing the **HOLD/RELEASE** button. To release, press the **HOLD/RELEASE** button again.

7. After the weight measurement has been taken and is recorded, have the patient step off the scale.

8. Press the **ON/OFF** button to power the scale off.

Weight Recall

The last weight reading on the scale can be recalled by pressing the **RECALL** button. To clear the display of the recalled weight, press the **ENTER** button.

Note: Clearing the recalled weight from the display will not clear the recalled weight from memory. The recalled weight will remain in memory until another weight is obtained.

BMI Function

Body Mass Index is another name for Quetelet Index, a formula that is a convenient indicator of BMI with various exemptions, such as athletes, children, the elderly, and the infirm.

Note: The scale will not calculate BMI for a patient that is 24 pounds (12 kg) or less. If a height is not entered for the patient within 30 seconds of pressing the **BMI** button, the scale will return to the normal weighing mode.

1. Make sure there is no object on the weighing platform.

2. Press the **ON/OFF** button to power the scale on.

3. Wait until the “0.0” LB or “0.0” KG appears on the display.

4 Ask the patient to step on the scale. The scale will begin to display weight information and will lock on the patient’s weight when the stable weight of the patient is determined. Depending on the movement of the patient on the scale, it may take several seconds for the scale to lock onto the weight.

5. Once a weight has been displayed, while the patient is still on the scale, Health o meter recommends performing a second weighing by pressing the **REWEIGH** button.

6. After obtaining the patient’s weight on the scale, press the **BMI** button while the scale is on.

7. The scale will prompt you to enter the patient’s height. Use the keypad ▲ and ► buttons to enter the patient’s height.

Note: When weighing in pounds, the height is displayed in inches. When weighing in kilograms, the height is displayed in centimeter.

8. Once height is keyed in, press the **ENTER** button.

9. The display will show the patient’s BMI.

10. Press the **ENTER** button to return to the normal weighing mode of the scale.

MAINTENANCE

Maintenance

The following pages provide instructions for maintenance, cleaning, calibration, and troubleshooting for the 1100KL scale. Maintenance operations other than those described in this manual should be performed by qualified service personnel.

Caution: Before first use, or after long periods of non-use, check the scale for proper operation and function. If the scale does not operate correctly, refer to qualified service personnel.

1. Check overall appearance of the total scale for any obvious damage, wear, and tear.
2. Inspect the AC adapter for cord cracking or fraying, or for broken/bent prongs.

Note: This scale is an extremely sensitive weighing device. If the auto-off function is disabled, battery power will be consumed.

Cleaning

Proper care and cleaning is essential to ensure a long life of accurate and effective operation.

Caution: Disconnect the scale from the AC adapter power source prior to cleaning the unit.

1. Clean all external surfaces with a clean damp cloth or tissue. Mild antimicrobial or antibacterial soap and water solution may be used. Dry with a clean soft cloth.
2. Do not immerse the scale into cleaning or other liquid solutions.
3. Do not use Isopropyl Alcohol or other solutions to clean the display surface.
4. Do not use abrasive cleaners.

CALIBRATION

Calibration

This scale has been factory calibrated, and does not require calibration prior to use. For maintenance, the scale can be calibrated. Calibration of your 1100KL scale is performed using kilograms (KG) or pounds (LB), according to the units of measure used upon entering into the calibration path. The following calibration assumes the scale is set to pounds, and 400 lb (the default weight) is employed as the calibration weight.

Scale Calibration

Operator Action	Display
1. Make sure the display is powered off, then press and hold the **HOLD/RELEASE** button while pressing the **ON/OFF** button.	"U 01" followed by a 5 digit 'idle scale count' number.
2. Press the **ENTER** button.	"CAL".
3. Make sure there is nothing on the scale, then press the **ENTER** button.	"Clear" followed by "0400.0LB".
4. Use the ► and ▲ buttons to set the calibration weight to a value other than the default weight. The calibration weight should be as high as possible, with 400 lb as a minimum calibration weight.	Shows "400.0" or entered calibration weight.
5. Press the **ENTER** button.	Alternating "Load" followed by "400.0LB".
6. Load the scale with the required weight.	Display increments showing raw weight data.
7. Without touching or shaking the scale, allow the display to stabilize, then press the **ENTER** button.	"SUCC" or "Err1".
8. If the calibration is successful, the display will show SUCC and power off. If the calibration is not successful, the display will show Err1 and power off. Contact customer service for an Err1 display (+1 800-638-3722).	-------

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TROUBLESHOOTING

Troubleshooting

Before contacting service personnel, refer to the following instructions to check and to correct any failures.

Symptom	Possible Cause	Corrective Action
Scale does not power on	1. Dead Battery	1. Replace batteries
	2. Faulty electrical outlet	2. Use a different outlet
	3. Bad power supply	3. Replace AC adapter
Questionable weight or the scale does not zero	1. External object interfering with the scale	1. Remove interfering object from the scale
	2. The display did not show "0.0" before weighing	2. Ask the patient to get off the scale, zero the scale and begin weighing process again
	3. Scale is not placed on a level floor	3. Place the scale on a level floor and begin weighing process again
	4. Scale is out of calibration	4. Check weight with known weight value
	5. Improper Tare	5. Place the item to be tared on the scale. Press **REWEIGH**. Once the weight of the item is displayed, press **TARE**. Place the patient and the tared item back on the scale. Press **REWEIGH** again
Weighing is performed but the weighing process takes too long and the weight does not lock on the displayed	The patient is not sitting or standing still	Ask the patient to stand or sit still
The display shows "Over" message	The load on the scale exceeds the capacity (1000 lb / 454 kg)	Remove the excess weight and use the scale according to its limits
The display shows "Lo bAtt" message	The batteries are discharged	Replace batteries according to instructions

WARRANTY

Limited Warranty

What does the Warranty Cover?

Health o meter® Professional scales are warranted from date of purchase against defects of materials or in workmanship for a period of two (2) years. If product fails to function properly, return the product, freight prepaid and properly packed to Pelstar, LLC (see "To Get Warranty Service", below, for instructions). If the manufacturer determines that a defect of material or in workmanship exists, the customer's sole remedy will be repair or replacement of the scale at no charge. Replacement will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. All parts including repaired and replaced parts are covered only for the original warranty period.

Who is Covered?

The original purchaser of the product must have proof of purchase to receive warranty service. Please save your invoice or receipt. Pelstar dealers or retail stores selling Pelstar products do not have the right to alter, or modify or any way change the terms and conditions of this warranty.

What is Excluded?

Your warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current, use contrary to the operating instructions, abuse including tampering, damage in transit, or unauthorized repair or alternations. Further, the warranty does not cover natural disasters, such as fire, flood, hurricanes and tornadoes. This warranty gives you specific legal rights, and you may also have other rights that vary from country to country, state to state, province to province or jurisdiction to jurisdiction.

To get Warranty Service make sure you keep your sales receipt or document showing proof of purchase. Call (+1) 800-638-3722 or (+1) 708-377-0600 to receive a return authorization (RA) number, which must be included on the return label. Attach your proof of purchase to your defective product along with your name, address, daytime telephone number and description of the problem. Carefully package the product and send with shipping and insurance prepaid to:

Pelstar, LLC

Attention R/A#_____

Return Department

9500 West 55th Street

McCook, IL 60525

If your scale is not covered by warranty, or has been damaged, an estimate of repair costs or replacement costs will be provided to you for approval, prior to servicing or replacing.

PELSTAR, LLC

9500 West 55th Street • McCook, IL 60525 • USA

1-800-638-3722 or 1-708-377-0600

PLEASE REGISTER YOUR SCALE FOR WARRANTY COVERAGE AT:
http://www.homscales.com/customers/registration.aspx

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We reserve the right to improve, enhance, or modify Health o meter® Professional product features or specifications without notice.

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ISO13485:2003
CERTIFIED

P/N UM1100KL Rev 3-080613